



# Choptank River Basin

## Current Status of Wadeable Streams

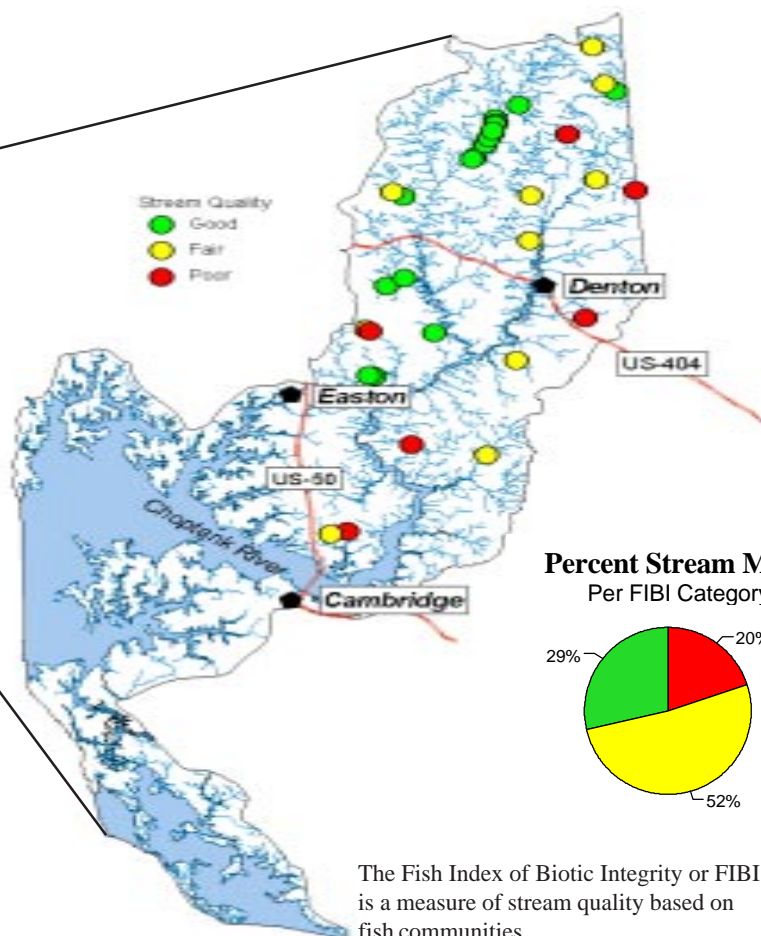


### Where is the Choptank River Basin?

The Choptank basin is located within Caroline, Dorchester, Queen Anne's, and Talbot counties, Maryland, with part of the basin extending into Delaware. The basin has the lowest elevation of any basin in Maryland. The Choptank, Little Choptank, and Honga Rivers, and Tuckahoe Creek are all part of the network of streams that make up the basin.

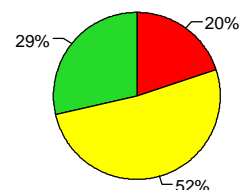


This stream in Maryland is known as Tidy Island Ditch.



The Fish Index of Biotic Integrity or FIBI is a measure of stream quality based on fish communities.

### Percent Stream Miles Per FIBI Category

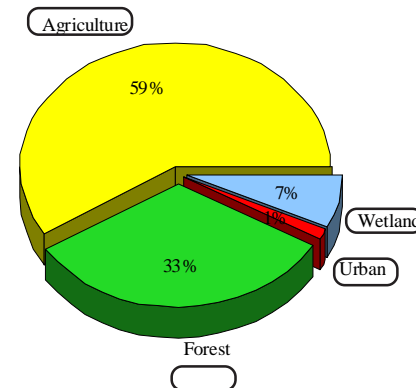


### What Lives in Our Streams?\*

|  |             |
|--|-------------|
| Estimated Fish Abundance:                | 3.9 million |
| Number of Fish Species:                  | 30          |
| Number of Gamefish Species:              | 2           |
| Number of Reptile and Amphibian Species: | 11          |
| Number of Freshwater Mussel Species:     | 3           |

\*Based on Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1997.

### Land Use in the Basin



Land use in the basin is primarily rural, with an agriculturally centered economy. The basin covers an area of 906 square miles, with a population density of 69 people per square mile. The population is expected to grow to about 72,000 people (an 18% increase) by 2020.



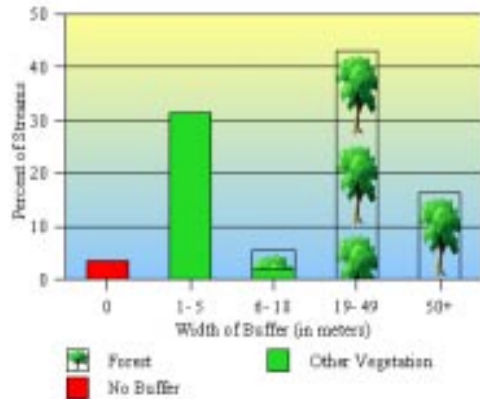
### Water Quality

- Oxygen** - 70% of the streams had oxygen levels above the state water quality standard of 5 mg/L.
- Nitrate** - 80% of the streams had nitrate levels (> 1 mg/L) that may affect aquatic life. The main sources of nitrates in small streams are fertilizers and acid rain.
- Buffering Capacity** - 54% of the streams are well buffered against acid rain.

Good Fair Poor

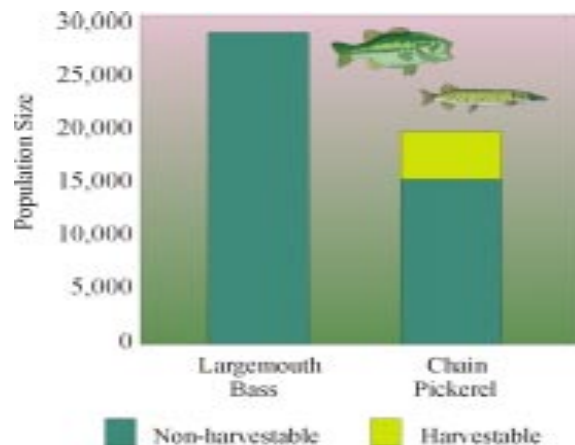
## Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Choptank basin are in fair condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



## Gamefish

Two species of gamefish were found in the Choptank basin. Few of the individuals were of harvestable size, but it does appear that the wadeable tributary streams of the basin serve as a nursery for gamefish.



## Did You Know???



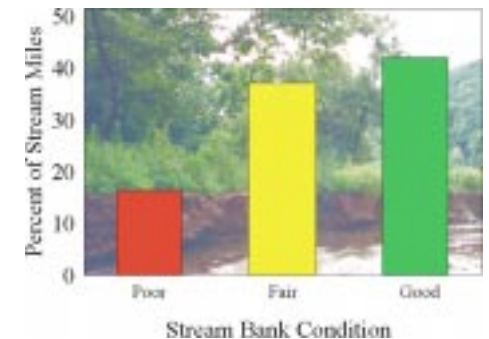
- The Choptank River, 68 miles long, is the longest river on the Eastern Shore.
- The river's Indian name means "place of big current" or "where the water flows back strongly".
- In 1734, the Europeans signed a treaty with the Choptank Indians. By 1799, the Choptank Indians were represented by only four individuals.



*The ironcolor shiner, highly rare in Maryland, is found in the Choptank River basin.*

## Stream Bank Stability

Eroded, unstable banks reduce the habitat quality in streams and contribute to water quality problems in downstream areas. On average, the stability of stream banks in the basin is fairly good. Since streams in the basin flow into the Chesapeake Bay, the bank instability that is present in the basin causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



## Recreation

There are many places to enjoy recreational activities in the basin, such as the Taylor's Island Wildlife Management Area and Tuckahoe State Park. Popular activities include fishing, hunting, canoeing, swimming, boating, hiking, and trapping.



*A man enjoys canoeing on Tuckahoe Creek at Tuckahoe State Park.*

## Community Involvement

Want to help? These community groups can show you how!

Alliance for the Chesapeake Bay  
6600 York Road, Suite 100  
Baltimore, MD 21212  
Kathleen Millan (410) 377-6270

Friends of the Upper Choptank River  
25355 Moot Point Lane  
Greensboro, MD 21639  
Peter Taillie (410) 479-3529



For more detailed information on streams in the Choptank basin and elsewhere in Maryland contact Ann Smith of DNR/MANTA at (410) 260-8610 or email [asmith@dnr.state.md.us](mailto:asmith@dnr.state.md.us), or check out the DNR web site at [www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html](http://www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html)